

OSCARS QuickStart

Oct, 2011

Set environent variables

Set the environment variables \$OSCARS_DIST and \$OSCARS_HOME.
\$OSCARS_DIST is the source directory for OSCARS.
\$OSCARS_HOME is the deployment directory.

Get code

You can use svn to download the most recent set of OSCARS sources, the most recent v 0.6 release candidate or you can download a tar file of the last checkpointed SDK set of sources(Jan 2011) . To use svn

```
cd $OSCARS_DIST

svn co https://oscars.es.net/repos/oscars/trunk latest sources
svn co https://oscars.es.net/repos/oscars/branches/rel-06-20110603
svn co https://oscars.es.net/repos/oscars/releases/oscars-0.6-sdk-
01.11.11 - sdk release
```

The tar file including all the necessary jar files can be downloaded from the oscars-idc wiki at

<http://code.google.com/p/oscars-idc/wiki/SoftwareDownload>

Binary Distribution

Run \$OSCARS_DIST/deployOscarsBin.sh to initialize the mysql tables. (see below for details)

Run \$OSCARS_DIST/bin/exportconfig

Source Distribution

Run \$OSCARS_DIST/bin/deployOscarsSrc.sh script which configures the OSCARS package. This script may be run more than once. If it has already completed an action, it will not change the result.

1. Creates the \$OSCARS_HOME directory if it does not exist.
2. Prompts for the mysql root user password. If this password is empty, set it with the following command:
`/usr/bin/mysqladmin -u root password 'new-password'`
3. Executes several scripts to create and initialize the OSCARS authN, author, rm and ion databases and tables.
If you receive the following errors you have incorrectly entered the mysql root password
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: YES)
ERROR 1045 (28000): Access denied for user 'root'@'localhost' (using password: NO)
4. Copies all the config.yaml.template files to their non-template versions. These files are needed for configuring the OSCARS package.
NOTE: the config.yaml files define the mysql oscarsUser and password and the port on

which each service it to run. If you need to change these values, edit the config.yaml files in the config directory in each service directory.

Build the system using:
mvn install.

the following mvn switches may be useful

- DskipTests - skips all the unit tests
- Dmaven.test.failure.ignore=true - executes the unit tests, but continues after failures

As the last step in the build the \$OSCARS_DIST/bin/exportconfig command will be run. This command copies config files from \$OSACRS_DIST to \$OSCARS_HOME and executes few other commands to configure the OSCARS package completely. NOTE exportconfig will not overwrite files that have already been copied.

Start the servers

Run \$OSCARS_DIST/bin/startServers.sh dev | sdk ALL to start all the OSCARS Services
\$OSCARS_DIST/bin/testServers.sh. dev | sdk checks to see that all the services have started

Test the installation

There are several scripts in \$OSCARS_DIST/api/bin.

```
createRes.sh -pf <paramFile>
modifyRes.sh -gri <gri> -bw <bandwidth> -start <startTime> -end
<endTime>
cancelRes.sh -gri <gri>
query.sh -gri <gri>
list.sh -n <numReq> -o <offset> -st <status>
setupPath.sh -gri <gri>
teardownPath.sh -gri <gri>
```

These scripts can be run in the following contexts: PRODUCTION/pro, DEVELOPMENT/dev, SDK/sdk, and UNITTEST/test. In SDK and UNITTEST all the services are run over http. In DEVELOPMENT authN, authNPolicy and WBUI are run over https. So far all the contexts run the services on the same ports, but the plan is to have different contexts (especially UNITTEST) to use their own set of ports.

Some sample paramFiles can be found in api/src/test/resources/*.yaml

autoTD1.yaml – creates a reservation of 4 minutes duration, starting immediately in testdomain-1. It should work with the default installation.

autoTD2.yaml – like TD1 except it creates the reservation in testdomain-2. To use this you must change the localDomain:id to testdomain-2 in topoBridge/config/config.yaml

signalTD1.yaml – creates a signal-xml reservation in testdomain-1 that will be exist for 5 days. You can use this reservation to test the setupPath and teardownPath operations.

autoTD3TD4.yaml – creates a mutli-domain reservation starting in testdomain-3 and ending in testdomain-4.

Stop Servers

Run \$OSCARS_DIST/bin/stopServers ALL to stop all the servers.

Individual servers can be started or stopped by using one or more of the following

names:

authN authZ api coord topoBridge rm stubPSS eomplsPSS dragonPSS
openFlow PSS lookup wbui bwPCE connPCE dijpCE vlanPCE nullAgg
notifyBridge wsnbroker ionui